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IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Renato J. Recio et al.

Confirmation No.: 4255

Application No.: 09/980,760

Examiner: Unassigned

Filing Date: Nov. 26, 2001

Group Art Unit:

Title: CONGESTION MANAGEMENT IN DISTRIBUTED COMPUTER SYSTEM

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

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INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97 (c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:  
☐ Statement under 37 CFR 1.97(e)(1) or (2), and  
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).  
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Statement together with any required copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

- ☐ I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit: May 10, 2004  
OR  
☐ I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number \_\_\_\_\_ on \_\_\_\_\_  
Number of pages: \_\_\_\_\_  
Typed Name: Patrick G. Billig  
Signature: \_\_\_\_\_

Respectfully submitted,

Renato J. Recio et al.

By

Patrick G. Billig

Attorney/Agent for Applicant(s)  
Reg. No. 38,080

Date: May 10, 2004



FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

10003629-3

APPLICATION NO.

09/980,760

CONFIRMATION NO.

4255

APPLICANT

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GROUP

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	1A	4,475,192	10/1984	Fernow et al.	<b>RECEIVED</b> <b>MAY 14 2004</b> <b>Technology Center 2100</b>
	1B	5,506,964	4/1996	Beukema	
	1C	5,701,292	12/1997	Chiussi et al.	
	1D	5,734,653	3/1998	Hiraiwa et al.	
	1E	5,802,051	9/1998	Petersen et al.	
	1F	5,802,295	9/1998	Fukui et al.	
	1G	5,812,527	9/1998	Kline et al.	
	1H	5,987,506	11/1999	Carter et al.	
	1I	6,026,448	2/2000	Goldrian et al.	
	1J	6,047,323	4/2000	Krause	
	1K	6,286,052	9/2001	McCloghrie et al.	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	1L					
	1M					
	1N					
	1O					
	1P					

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

1Q	Brakmo, Lawrence S. et al., "TCP Vegas: End to End Congestion Avoidance on a Global Internet," IEEE Journal on Selected Areas in Communications, Vol. 13, No. 8, pp. 1465-1480 (October 1995).
1R	Cisco Systems, Inc., "Optimizing Your Network Design," Macmillan Publishing USA, pp. 1-23, (1999). < www.cisco.com >
1S	ElIoumi, Omar et al., "Improving Congestion Avoidance Algorithms for Asymmetric Networks," IEEE, pp. 1417-1421 (1997).

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	2A	6,434,624	8/2002	Gai et al.	
	2B				
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2Q	Henderson, Thomas R. et al., "On Improving the Fairness of TCP Congestion Avoidance," IEEE, pp. 539-544 (1998).
2R	IBM Corp., "Direct Memory Access Tag Architecture," IBM Technical Disclosure Bulletin, Vol. 32, No 4B, pp. 143-151 (September 1989).
2S	Kim, Jin-Ho et al., "TCP Deadlock Due to Coarse Timer Granularities in Unix-Based Systems," Electronics Letters, Vol. 35, No. 14, (July 8, 1999).

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## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

3Q	Misra, Archan et al., "The Window Distribution of Idealized TCP Congestion Avoidance with Variable Packet Loss," IEEE, pp. 1564-1572 (1999).
3R	Moldeklev, Kjersti et al., "How a Large ATM MTU Causes Deadlocks in TCP Data Transfers," IEEE/ACM Transactions on Networking, Vol. 3, No. 4, pp. 409-422 (August 1995).
3S	Parsa, Christina et al., "Improving TCP Congestion Control over Internets with Heterogeneous Transmission Media," IEEE Computer Society, Seventh International Conference on Network Protocols (ICNP'99), pp. 213-221 (October 31-November 3, 1999).

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## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

4Q	Ren, Jing-Fei et al., "Flow Control and Congestion Avoidance in Switched Ethernet LANs," IEEE, pp. 508-512 (1997).
4R	Rohrs, Charles E. et al., "A Control Engineer's Look at ATM Congestion Avoidance," IEEE, pp. 1089-1094 (1995).
4S	Rosenberg, Jonathan et al., "Timer Reconsideration for Enhanced RTP Scalability," IEEE, pp. 233-241 (1998).

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	5N				
	5O				
	5P				

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

5Q	"Congestion Avoidance Overview," pp. QC-69-QC76.
5R	"Weighted Random Early Detection on the Cisco 12000 Series Router," pp. 1-26.
5S	

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